

REMARKS

The above amendments are made in response to the outstanding Non-final Office Action dated October 16, 2009. The Examiner's reconsideration is respectfully requested in view of the above amendments and the following remarks.

Claims 13, 15-21, 23-28, 30, 32-37, 39 and 40 have been amended to more clearly define the subject matter of the claimed invention. Claims 29, 38 and 41 have been cancelled. Claims 1-12 have previously been cancelled. The title of this application has been amended to conform to the claimed subject matter. No new matter has been introduced by these amendments.

Claims 13-28, 30-37, 39 and 40 are thus pending in the present application.

Claim Rejections Under 35 U.S.C. § 102

Claims 13, 15, 17 and 39 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yarwood et al. (U.S. Patent No. 4,075,303; hereinafter, "Yarwood").

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988). "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the ...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants have amended Claims 13, 15, 17 and 39 to more clearly define the claimed subject matter and thus overcome this rejection.

Claim 13 is independent and Claims 15, 17 and 39 are directly dependent from Claim 13.

The amended Claim 13 reads as follows:

A method for preparing a porous composite of polymer sponge and ceramic body with excellent thermal insulation property, the method comprising:
an impregnation step in which the polymer sponge having a three-dimensional porous network structure with open cells is immersed in an inorganic adhesive solution, such that the polymer sponge is impregnated with the inorganic adhesive solution;
a dewatering step in which the inorganic adhesive solution is partially removed from the polymer sponge impregnated with the inorganic adhesive solution so as to create pores in the open cells of the three-dimensional porous network structure at an amount selected according to a desired density of the ceramic body, wherein the pores are coated with the inorganic adhesive solution; and
a drying step in which the coated inorganic adhesive solution is dried and cured to form the ceramic body coated in the pores,
wherein the porous composite includes the polymer sponge and the ceramic body coated in the pores of the polymer sponge.

As above, the claimed invention is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge.

In contrast, Yarwood is directed to a ceramic foam for filtration of molten metals, using a sponge. Therefore, in Yarwood, the sponge must be removed for the ceramic foam to be used as a molten metal filter (see lines 44-49 on column 2, lines 46-50 on column 8 and claim 1 thereof). In contrast, the claimed invention is configured to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. That is, the claimed invention has a specific application or use different from Yarwood, and thus not anticipated by Yarwood. Further, the Examiner has stated, on page 3 of the Office Action, that Yarwood teaches that the sponge does not have to be further heated for sintering (col. 2, lines 47-49). However, Applicants submit that the ceramic foam, in which the sponge is removed, does not have to be further heated for sintering, but the Yarwood sponge must be heated to be removed. In contrast, the claimed invention is configured such that the polymer sponge remains, along with a ceramic body coated in the pores of the polymer sponge.

Applicants note that the above arguments were presented in the interview with the Examiner held on February 3, 2010. The Examiner has indicated in the Interview Summary that the amended claims appear to overcome the Yarwood reference.

It is therefore respectfully submitted that Yarwood does not anticipate Applicants' claimed invention since it does not contain *each and every limitations as set forth* in the amended Claim 13, and its specific application or use is different from the claimed invention.

Claims 15, 17 and 39 are also believed not anticipated by Yarwood, by virtue of their direct dependency from the amended Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claims 13, 15, 17 and 39 under 35 U.S.C. §102(b).

Claim Rejections Under 35 U.S.C. §103

In order for an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). See MPEP 2143.

Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Further, even assuming that all elements of an invention are disclosed in the prior art, an Examiner cannot establish obviousness by locating references that describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would have impelled one skilled in the art to do what the patent applicant has done. *Ex parte Levengood*, 28 U.S.P.Q. 1300 (Bd. Pat. App. Int. 1993). The references, when viewed by themselves and not in retrospect, must suggest the invention. *In re Skill*, 187 U.S.P.Q. 481 (C.C.P.A. 1975).

Rejection of Claim 14

Claim 14 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood.

Claim 14 is directly dependent from Claim 13.

As discussed above in connection with the 102 rejection, the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge.

In contrast, Yarwood is directed to a ceramic foam for filtration of molten metals, using a sponge. Therefore, in Yarwood, the sponge must be removed for the ceramic foam to be used as a molten metal filter (see lines 44-49 on column 2, lines 46-50 on column 8 and claim 1 thereof). In contrast, the claimed invention is configured to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. That is, the claimed invention has a specific application or use different from Yarwood. Further, in Yarwood, the removal of the sponge is desired and required. It is therefore respectfully submitted that *prime facie* obviousness does not exist in the Yarwood reference.

Applicants note that the above arguments were presented in the interview with the Examiner held on February 3, 2010. The Examiner has indicated in the Interview Summary that the amended Claims appear to overcome the Yarwood reference.

In view of the above discussion, Applicants respectfully submit that the amended Claim 13 is now allowable over the Yarwood reference.

Claim 14 is also believed to be allowable over Yarwood, by virtue of its direct dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 14 under 35 U.S.C. §103(a).

Rejection of Claim 16

Claim 16 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Yasuda, et al. (U.S. Patent No. 3,886,100; hereinafter, "Yasuda").

Claim 16 is directly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

Yasuda discloses a surfactant being added to the impregnation solution in order to add the solution homogeneously to the polymer. However, it is submitted that Yasuda fails to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood and Yasuda.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood and Yasuda.

Claim 16 is also believed to be allowable over the cited references, by virtue of its direct dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 16 under 35 U.S.C. §103(a).

Rejection of Claim 18

Claim 18 is rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Jin (U.S. Patent No. 6,296,699).

Claim 18 is directly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

Jin discloses that sodium silicofluoride is a known hardener for use with alkali metal silicates. However, it is submitted that Jin fails to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood and Jin.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood and Jin.

Claim 18 is also believed to be allowable over the cited references, by virtue of its direct dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 18 under 35 U.S.C. §103(a).

Rejection of Claim 19

Claim 19 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Boutle (U.S. Patent No. 4,157,424).

Claim 19 is directly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

Boutle discloses that a surface active agent may affect the ability of a porous body to become wetted by liquids. However, it is submitted that Boutle fails to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood and Boutle.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood and Boutle.

Claim 19 is also believed to be allowable over the cited references, by virtue of its direct dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 19 under 35 U.S.C. §103(a).

Rejection of Claim 20

Claim 20 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Crooke et al. (U.S. Patent No. 4,332,753; hereinafter, "Crooke").

Claim 13 is directly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

Crooke is directed to a porous refractory material. However, it is submitted that Crooke fails to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood and Crooke.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood and Crooke.

Claim 20 is also believed to be allowable over the cited references, by virtue of its direct dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 20 under 35 U.S.C. §103(a).

Rejection of Claims 21-23, 29 and 40

Claims 21-23, 29 and 40 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Tansill (U.S. Patent No. 4,272,898) and Fuma et al. (U.S. Patent No. 4,623,499; hereinafter, "Fuma").

Claim 29 has been cancelled. Claims 21-23 and 40 are directly or indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

Tansill discloses that a liquid curing agent can be impregnated into the pores of a polyurethane foamed material. Fuma discloses that a gaseous curing agent can be passed through a structure to aid curing and encourage solidification. However, it is submitted that Tansill and Fuma, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Tansill and Fuma.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Tansill and Fuma.

Claims 21-23 and 40 are also believed to be allowable over the cited references, by virtue of their direct or indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claims 21-23, 29 and 40 under 35 U.S.C. §103(a).

Rejection of Claim 24

Claim 24 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Tansill and Fuma, and further in view of Yasuda.

Claim 24 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 21-23, 29 and 40, and Claim 16. Tansill, Fuma and Yasuda, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Tansill, Fuma and Yasuda.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Tansill, Fuma and Yasuda.

Claim 24 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 24 under 35 U.S.C. §103(a).

Rejection of Claim 26

Claim 26 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Tansill and Fuma, and further in view of Jin.

Claim 26 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 21-23, 29 and 40, and Claim 18. Tansill, Fuma and Jin, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Tansill, Fuma and Jin.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Tansill, Fuma and Jin.

Claim 26 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 26 under 35 U.S.C. §103(a).

Rejection of Claim 27

Claim 27 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Tansill and Fuma, and further in view of Boutle.

Claim 27 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 21-23, 29 and 40, and Claim 19. Tansill, Fuma and Boutle, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Tansill, Fuma and Boutle.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Tansill, Fuma and Boutle.

Claim 27 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 27 under 35 U.S.C. §103(a).

Rejection of Claim 28

Claim 28 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Tansill and Fuma, and further in view of Crooke.

Claim 28 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 21-23, 29 and 40, and Claim 20. Tansill, Fuma and Boutle, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Tansill, Fuma and Crooke.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Tansill, Fuma and Crooke.

Claim 28 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 28 under 35 U.S.C. §103(a).

Rejection of Claims 30-32, 34, 38 and 41

Claims 30-32, 34, 38 and 41 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Andersson (U.S. Patent No. 4,483,889).

Claims 38 and 41 have been cancelled. Claims 30-32 and 34 are directly or indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

Andersson discloses that conventional additives can be used in the impregnation solution, such as curing catalysis. However, it is submitted that Andersson fails to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood and Andersson.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood and Andersson.

Claims 30-32 and 34 are also believed to be allowable over the cited references, by virtue of their direct or indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claims 30-32, 34, 38 and 41 under 35 U.S.C. §103(a).

Rejection of Claims 33

Claim 33 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Andersson, and further in view of Yasuda.

Claim 33 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 30-32, 34, 38 and 41, and Claim 16. Andersson and Yasuda, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Andersson and Yasuda.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Andersson and Yasuda.

Claim 33 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 33 under 35 U.S.C. §103(a).

Rejection of Claim 35

Claim 35 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Andersson, and further in view of Jin.

Claim 35 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 30-32, 34, 38 and 41, and Claim 18. Andersson and Jin, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Andersson and Jin.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Andersson and Jin.

Claim 35 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 35 under 35 U.S.C. §103(a).

Rejection of Claim 36

Claim 33 (*sic*, Claim 36) stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Andersson, and further in view of Boutle.

Claim 36 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 30-32, 34, 38 and 41, and Claim 19. Andersson and Boutle, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Andersson and Boutle.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Andersson and Boutle.

Claim 36 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 36 under 35 U.S.C. §103(a).

Rejection of Claim 37

Claim 37 stands rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Yarwood in view of Andersson, and further in view of Crooke.

Claim 37 is indirectly dependent from the amended Claim 13.

As discussed above in connection with the rejection of Claim 14 under 35 U.S.C. §103(a), the amended Claim 13 is directed to a method for preparing a porous composite of polymer sponge and ceramic body, and includes impregnation, dewatering and drying steps to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge. However, the amended Claim 13 is not rendered obvious over the Yarwood reference.

As discussed above in connection with the rejections of Claims 30-32, 34, 38 and 41, and Claim 20. Andersson and Crooke, either alone or in combination, fail to teach the claimed method for preparing a porous composite of polymer sponge and ceramic body to obtain a porous composite comprised of a polymer sponge and a ceramic body coated in the pores of the polymer sponge, as recited in the amended Claim 13.

Thus, Applicants submit that *prime facie* obviousness does not exist in the proposed combination of Yarwood, Andersson and Crooke.

It is therefore respectfully submitted that the amended Claim 13 is now allowable over Yarwood, Andersson and Crooke.

Claim 37 is also believed to be allowable over the cited references, by virtue of its indirect dependency from Claim 13.

Applicants respectfully request the Examiner to review these submissions and withdraw the rejection of Claim 37 under 35 U.S.C. §103(a).

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Reconsideration and subsequent allowance of this application are courteously requested.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

The Examiner is invited to contact Applicants' Attorneys at the below-listed telephone number with any questions or comments regarding this Response or otherwise concerning the present application.

Respectfully submitted,

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